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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/576,193

04/17/2006

Tsukasa Fujieda

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EXAMINER

WALTERS JR, ROBERT S

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

08/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,193	Applicant(s) FUJIEDA, TSUKASA	
	Examiner ROBERT S. WALTERS JR	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/17/2006, 7/17/2006, 3/4/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Status of Application

Claims 1-18 are pending and presented for examination.

Specification

The disclosure is objected to because of the following informalities: The specification is missing the required sections and headings.

Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.

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- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

Claim 10 is objected to because of the following informalities: Claim 10 should begin on a separate line for clarity. Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1-18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No.

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10/576277. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of copending application No. 10/576277 are essentially identical to the claims of the present application, with the exception that the claims of the current application have an additional base and clearcoat layer over the first set of base and clearcoat layers. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Application No. 10/576277 to add the additional layers with a reasonable expectation of success and a predictable result of forming a luster coating film.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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2. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomioka (U.S. Pat. No. 5079030) in view of Carpenter (U.S. Pat. No. 5320673) and Takashi et al. (JP Pub. No. 2001-149857).

Regarding claims 1-18, Tomioka teaches a method of forming a luster coating film (see abstract) comprising the steps of:

(1) applying an aqueous luster base coating composition to a substrate in two to five stages, such that the thickness of the base coating applied in each of the second and subsequent stages is between 0.3 to 5 μm when cured (this is accomplished by using only an air spray gun in the second and subsequent stages, see column 4, lines 19-32);

(2) applying a clear coating composition over the uncured or heat-cured coating layer of the base coating composition (column 4, lines 38-40);

(3) heating the two-layer coating comprising the base coating composition and the clear coat to obtain a cured two-layer coating film (column 4, lines 40-45).

Tomioka further teaches applying the base coating in the first stage to a thickness of 8 microns (column 4, line 25). Further, Tomioka teaches that 50-80% of the total coat thickness is applied after the first stage (see claim 1) by a rotary atomizer with a transfer efficiency of 60-80% (column 1, lines 23-28), which is expected to provide a coating with at least 40% solids after one minute or alternatively one of ordinary skill in the art at the time of the invention could have chosen the instantly claimed range through process optimization to be greater than 40% solids content one minute after the application by adjusting the initial paint composition or heating during the minute to remove moisture content (Tomioka teaches heating during the minute

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interval, see column 3, lines 58-64). Tomioka further teaches the substrate that is being coated is an automotive body (abstract) and also therefore teaches an automotive body having a luster coating film formed by the method (abstract).

Tomioka however fails to explicitly teach the base coatings and clear coatings being thermosetting coatings, the aqueous base coatings comprising the components as claimed in claims 2, 5, 11 and 14, and an additional step of applying a second clear coat layer directly on top of the previous clear coat layer. Tomioka further fails to teach applying a second set of base coating and clear coating compositions wherein the second base coating has a solids content of 40% after one minute and has a thickness after each stage of 0.3 to 5 microns. Carpenter teaches a method of forming a luster coating using an aqueous luster base coat and a clear coat (column 16, lines 54-68). Carpenter teaches that both these coatings may be thermosetting compositions (column 16, lines 65-66) and that preferably the clear coat is applied in two layers (column 16, lines 60-63). Carpenter further teaches an aqueous (column 14, lines 52-56) luster thermosetting base coat composition comprising a water soluble or dispersible crosslinkable functional group-containing resin (column 14, lines 63-68), a crosslinking agent (column 15, lines 3-7), and a flaky luster pigment (column 13, lines 45-47 and column 14, lines 40-42) which has been surface modified. Takashi teaches forming a luster coating by forming a first metallic coating followed by a clear coat and then further applying a second metallic coating and a second clear coat layer followed by curing of all the coats (abstract). Takashi further teaches that the second metallic coating thickness should be only 5- 13 microns as it should be no more than a concealing film thickness.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tomioka's method by adding an additional base coat and clear coat layer according to Takashi as well as utilizing the compositions and an additional clear coat layer as disclosed by Carpenter to obtain a four or five-layer coating. Regarding the additional base coat layer, as this layer is expected to serve as a concealing layer, it would also have been obvious to one of ordinary skill in the art at the time of the invention to choose the instantly claimed range of applying the second base layer to a thickness of 0.3 to 5 microns in each stage through routine process optimization by utilizing only the air spray gun in Tomioka's method. Further, it would have been obvious to one of ordinary skill in the art at the time of the invention to choose the instantly claimed range of having the second base coat layer having a solids content of 40% one minute after the application through process optimization, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art.

One would have been motivated to modify Tomioka's method by adding the second base coat in the claimed thickness and the second clear coat as disclosed by Takashi as Takashi teaches that these steps allow for the coating to be free from metal unevenness and provides an excellent flip-flop property (abstract). Further, one would have been motivated to utilize the compositions and methods disclosed by Carpenter as he teaches that his method provides coatings having an excellent appearance and physical properties (column 16, lines 66-68) and that the metallic flakes described are resistant to oxidation with minimal discoloration or diminution of the metallic effect, and provide superior dispersion in the waterborne composition

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and thus result in a coating with an enhanced metallic effect and improved color development (column 2, lines 31-43).

Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shiraga et al. (U.S. Pat. No. 5378275)

Kuwajima et al. (U.S. Pat. No. 4820555)

Conclusion

Claims 1-18 are pending.

Claims 1-18 are rejected.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT S. WALTERS JR whose telephone number is (571)270-5351. The examiner can normally be reached on Monday-Thursday, 6:30am to 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ROBERT S. WALTERS JR/
August 26, 2008
Examiner, Art Unit 1792

/Michael Barr/
Supervisory Patent Examiner, Art Unit
1792
